



#### State Water Resources Control Board

Division of Drinking Water

July 3, 2015

Water System No. 4410016 Forest Lakes Mutual Water Company

Mr. Jory Berdan, President 910 Fern Ave Felton, CA 95018

Attention Mr. Berdan:

COMPLIANCE ORDER NO. 02\_05\_15R\_003
VIOLATION OF SURFACE WATER TREATMENT RULE

Enclosed is a Compliance Order issued to Forest Lakes Mutual Water Company (System) public water system.

The System will be billed at the State Water Resources Control Board's (Water Board) hourly rate (currently estimated at \$128.00) for the time spent on issuing this Compliance Order. California Health and Safety Code Section 116577 provides that a public water system must reimburse the Water Board for actual costs incurred by the Water Board for specified enforcement actions, including, but not limited to, preparing, issuing, and monitoring compliance with a compliance order. At this time, the Water Board has spent approximately two hours on enforcement activities associated with this violation.

The System will receive a bill sent from the Drinking Water Fee Branch in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the System for the current fiscal year.

If you have any questions regarding this matter, please contact Lora Lyons of my staff at (831) 655-6942 or me at (831) 655-6934.

Sincerely,

Jan R. Sweigert, P.E.

District Engineer, Monterey District Office Northern California Field Operations Branch

Division of Drinking Water

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

Enclosures

Certified Mail No. 7008-1830-0004-5435-0769

CC:

Santa Cruz County Environmental Health Department

Dawana Cortez, Office Manager Forest Lakes Mutual Water Company 910 Fern Avenue Felton, CA 95018

1 STATE OF CALIFORNIA 2 STATE WATER RESOURCES CONTROL BOARD DIVISION OF DRINKING WATER 3 4 5 TO: Forest Lakes Mutual Water Company 6 7 Water System No.: 4410016 8 9 ATTN: Mr. Jory Berdan, President 910 Fern Ave. 10 Felton, CA 95018 11 12 13 14 COMPLIANCE ORDER NO. 02 05 15R 003 VIOLATION OF HEALTH AND SAFETY CODE SECTION 116555 (a)(1) AND (a)(3) 15 16 AND SECTIONS 64652 AND 64653(a), CHAPTER 17, TITLE 22, CALIFORNIA 17 CODE OF REGULATIONS 18 Issued on July 3, 2015 19 20 Section 116655 of the California Health & Safety Code (hereinafter "CHSC") authorizes 21 the issuance of an order to a public water system for violations or threatened violations of 22 the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4 23 (commencing with Section 116270) (hereinafter "California SDWA"), or any permit, 24 regulation, or standard issued or adopted thereunder. 25 26 The State Water Resources Control Board (hereinafter "Water Board"), acting by and 27 through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for 28 the Division, hereby issues this compliance order (hereinafter "Order") pursuant to 29 Section 116655 of the CHSC to Forest Lakes Mutual Water Company (hereinafter 30 System) for violation of CHSC Sections 116555(a)(1) and (a)(3), and Sections 64652 and



64653(a) of Chapter 17, Title 22, California Code of Regulations (CCR).

A copy of the applicable statutes and regulations are included in Appendix 1, which is attached hereto and incorporated herein by this reference.

#### STATEMENT OF FACTS

The System is classified as a community water system which serves a population of approximately 1200 persons through 327 service connections.

The System utilizes eleven groundwater wells as its source of domestic water, as shown in the table below.

Well Name	Primary Station Code
Well 01A	4410016 - 004
Well 01D	4410016 - 005
Well 02A (Standby)	4410016 - 006
Well 03A	4410016 - 007
Well 03B	4410016 - 008
Well 04A	4410016 - 009
Well 05A	4410016 - 010
Well 08C	4410016 - 013
Well 08F	4410016 - 016
Well 10A	4410016 - 001
Well 10D (Granite Quarry)	4410016 - 017

Well 01A is located approximately 400 feet from Boulder Brook, in an area of high density septic systems (> 1 per acre). The Water Well Drillers Report for Well 01A indicates the well was completed on April 21, 1968. The well was drilled to a depth of 250 feet through layers of various types of granite and one layer of sandstone (from 230 to 235 feet). However, the sanitary seal and well casing for Well 01 were only installed to a depth of



20 feet. Therefore, Well 01A does not meet the construction requirements of California Water Well Standards, Bulletins 74- 81 and 74-90.

The raw water from Well 01A was monitored weekly for total coliform and E. coli until September 2009 when the System was allowed by the Division to monitor the raw water monthly. Since early 2009, coliform and E.coli have been detected as follows:

Date	Total Coliform Result		E. coli Result	
	Presence/Absence	No. per 100 mL	Presence/Absence	No. per 100 mL
2/12/2009	Р		Р	
1/26/2010		3.1		<1.0
2/8/2010		2		2
12/17/13	Р		Α	
12/18/2013		5.2		<1.0
1/21/2014		1		<1.0
2/20/2014		2		<1.0
4/2/2014		1		<1.0
12/4/2014		65.7		9.6
2/9/2015		26.2		3
3/20/2015		9.7		<1.0
4/16/2015		1		<1.0

Given the frequent presence of total coliform and/or E. coli in the raw water from Well 01A and the well's construction that does not meet the requirements of California Water Well Standards, 74-81 and Bulletins 74-90, the Division has determined that the water supplied by Well 01A cannot be considered to be safe to drink at all times without multi-barrier treatment.

The System is currently not using Well 01A as a primary source of water and has been directed to notify the Division prior to use if Well 01A is needed due to an emergency with another active source.



### **DETERMINATION**

On the basis of the above Statement of Facts, the Division finds that the System is in violation of the CHSC and Title 22 of the CCR. These violations include, but are not limited to the following:

CHSC Section 116555(a)(1). Specifically, the System is operating a water system
that produces water that does not comply with a primary drinking water standard at
all times.

CHSC Section 116555(a)(3). Specifically, the System has failed to ensure the
water system is providing to its consumers a reliable and adequate supply of pure,
wholesome, healthful, and potable water.

3. Section 64652, Chapter 17, Title 22 of the CCR. Specifically, the System does not provide multi-barrier treatment to the water from Well 01A that reliably ensures 3-log reduction of Giardia cysts and 4-log reduction of viruses using filtration and disinfection. The existing disinfection treatment facility for Well 01A cannot ensure 3-log reduction of Giardia cysts and 4-log reduction of viruses through a multi-barrier treatment because no filtration technology is provided.

4. <u>Section 64653(a), Chapter 17, Title 22 of the CCR</u>. Specifically, the System does not provide treatment to the water from Well 01A using an approved filtration technology or an alternative process that has been approved by the Division pursuant to Sections 64653 (f), (g), and (h).



1 ORDER 2 3 Pursuant to Section 116655 of the Health and Safety Code, the Division hereby orders 4 the Respondent, the System, to take the following actions to ensure that the water 5 system provides a reliable and adequate supply of pure, wholesome, healthful, and potable water: 6 7 8 The System is hereby directed to take the following actions: 9 10 1. On or before June 30, 2018, comply with CHSC Section 116555(a)(1) and (a)(3), and Chapter 17, Title 22 of the CCR, Section 64652 and Section 64653(a). 11 12 13 2. On or before July 31, 2015 submit a written response to the Division indicating its agreement to comply with the directives of this Order and with the Corrective 14 Action Plan addressed herein. 15 16 17 3. Continue to monitor Well 01 monthly for total coliform and E. coli. The samples should be labelled "Special" and must be analyzed by a certified laboratory using 18 19 a method that enumerates the result of coliform in the water. The results must be submitted to the Division by the 10<sup>th</sup> day of the following month. 20 21 4. Commencing on the date of service of this Order, provide public notification 22 23 pursuant to Title 22, CCR, Section 64463.1, whenever Well 01A is used to 24 discharge water to the distribution system. Appendix 2: Notification Template may



25

26

01A and approved by the Division before distribution to water users.

be used to fulfill this directive. The notice must be issued prior to the use of Well

14

17 18

19

20 21

22 23

24 25

26

5. Commencing on the date of service of this Order, submit proof of each public notification conducted in compliance with Directive No. 3, herein above, within 10 days following each such notification, using the form provided as Appendix 3 hereto.

6. Prepare a Corrective Action Plan for Division approval that identifies improvements to the water system designed to correct the water quality problem and ensure that the System is able to deliver a reliable and adequate supply of pure, wholesome, healthful, and potable water. The plan shall include a time schedule with a date for completion of each phase of the project such as, but not limited to, design, construction, and startup, and a date as of which the System will be in compliance with CHSC, Section 116555 (a)(3) and Chapter 17, Title 22

of the CCR, which date shall be no later than June 30, 2018.

7. On or before September 15, 2015 present the Corrective Action Plan required under Directive No. 5 above, during a meeting with the Division at either the Monterey District office or at the System office. Please contact the Monterey District office by August 15, 2015 to schedule the meeting.

- 8. Timely perform the Division approved Corrective Action Plan and each and every element of said plan according to the time schedule set forth therein.
- 9. On or before **January 10, 2016** and every three months thereafter, submit a report to the Division showing actions taken during the previous calendar three months to comply with the Corrective Action Plan, using the form provided as Appendix 4.



1	10. Notify the Division in writing no later than five (5) days prior to the deadline for		
2	performance of any Directive set forth herein if the System anticipates it will not		
3	timely meet such performance deadline.		
4			
5	All submittals required by this Order shall be addressed to:		
6 7 8 9 0 1	Jan R. Sweigert, P.E. District Engineer, Monterey District Office Northern California Field Operations Branch, Division of Drinking Water 1 Lower Ragsdale Drive, Building 1, Suite 120 Monterey, CA 93940		
3	As used in this Order, the date of issuance shall be the date of this Order; and the date of		
.4	service shall be the date of service of this Order, personal or by certified mail, on the		
.5	System.		
6			
7	The Division reserves the right to make such modifications to this Order and/or to issue		
8	such further order(s) as it may deem necessary to protect public health and safety. Such		
9	modifications may be issued as amendments to this Order and shall be deemed effective		
20	upon issuance.		
21			
22	Nothing in this Order relieves the System of its obligation to meet the requirements of the		
23	California SDWA, or any regulation, standard, permit or order issued thereunder.		
24			
25	PARTIES BOUND		
26			
27	This Order shall apply to and be binding upon the System, its owners, shareholders,		
28	officers, directors, agents, employees, contractors, successors, and assignees.		



The Directives of this Order are severable, and the System shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

**SEVERABILITY** 

#### **FURTHER ENFORCEMENT ACTION**

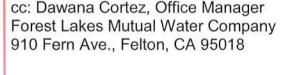
The California SDWA authorizes the Water Board to: issue a citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the Water Board; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the Water Board does not waive any further enforcement action by issuance of this Order.

Stefan Cajina, P.E., Chief

North Coastal Section

State Water Resources Control Board

Division of Drinking Water





## 1 2 3 4 5 6 7 8 9

## Appendices (4)

- Applicable Statutes and Regulations
   Boil Water Notice
- 3) Certification Form
- 4) Quarterly Progress Report Form

Certified Mail No. 7008-1830-0004-5435-0769

## **APPENDIX 1**

# APPLICABLE STATUTES AND REGULATIONS FOR COMPLIANCE ORDER NO. 02\_05\_15R\_003

## Section 116655 Of the Health and Safety Code states in relevant part:

- (a) Whenever the department determines that any person has violated or is violating this chapter, or any permit, regulation, or standard issued or adopted pursuant to this chapter, the director may issue an order doing any of the following:
  - (1) Directing compliance forthwith.
  - (2) Directing compliance in accordance with a time schedule set by the department.
  - (3) Directing that appropriate preventive action be taken in the case of a threatened violation.
- (b) An order issued pursuant to this section may include, but shall not be limited to, any or all of the following requirements:
  - (1) That the existing plant, works, or system be repaired, altered, or added to.
  - (2) That purification or treatment works be installed.
  - (3) That the source of the water supply be changed.
  - (4) That no additional service connection be made to the system.
  - (5) That the water supply, the plant, or the system be monitored.
  - (6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the department.

## Section 116555(a)(1) and (a)(3) Of the Health and Safety Code states in relevant part:

- (a) Any person who owns a public water system shall ensure that the system does all of the following:
  - (1) Complies with primary and secondary drinking water standards.
  - (3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

## <u>Section 64652 of Chapter 17, Title 22, California Code of Regulations (hereinafter CCR)</u> states in relevant part:

- (a) A supplier using an approved surface water shall provide multibarrier treatment that meets the requirements of this chapter and reliably ensures at least, between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer:
  - (1) A total of 99.9 percent reduction of *Giardia lamblia* cysts through filtration and disinfection;

- (2) A total of 99.99 percent reduction or viruses through filtration and disinfection; and
- (3) A total of 99 percent removal of Cryptosporidium through filtration.
- (b) A supplier meeting the requirements of section 64654 in combination with either section 64652.5 or 64653 shall be deemed to be in compliance with the minimum reduction requirements specified in subsections (a)(1) and (a)(2).
- (c) A supplier meeting the requirements of section 64652.5 or 64653 shall be deemed to be in compliance with the minimum removal requirement specified in subsection (a)(3).
- (d) A supplier serving 10,000 or more persons shall not begin construction of an uncovered finished water storage facility. If a supplier serving fewer than 10,000 persons began construction of a finished water reservoir on or after March 15, 2002, the reservoir shall be covered.
- (e) A supplier that uses conventional or direct filtration treatment and recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes shall comply with the recycle requirement of section 64653.5(b).
- (f) A supplier shall comply with the disinfection profiling and benchmarking requirements of section 64656.5.
- (g) A supplier shall comply with the treatment technique and microbial toolbox component requirements specified in sections 64650(f)(1) and (2).
- (h) No variances from the requirements in this section are permitted.

## Section 64653(a) of Chapter 17, Title 22, CCR states in relevant part:

- (a) All approved surface water utilized by a supplier shall be treated using one of the following filtration technologies unless an alternative process has been approved by the Department pursuant to subsections (e), (f), (g) and (h):
  - (1) Conventional filtration treatment:
  - (2) Direct filtration treatment;
  - (3) Diatomaceous earth filtration; or
  - (4) Slow sand filtration.

## Section 64653(f), (g), and (h) of Chapter 17, Title 22, CCR states in relevant part:

(f) The alternative filtration technology demonstration shall be based on the results from a prior equivalency demonstration or a testing of a full scale installation that is treating a water with similar characteristics and is exposed to similar hazards as the water proposed for treatment. A pilot plant test of the water to be treated may also be used for this demonstration if conducted with the approval of the Department. The

- demonstration shall be presented in an engineering report prepared by a qualified engineer.
- (g) A supplier proposing to use an alternative filtration technology may request from the Department a waiver to comply with the requirements of subsection (e) to demonstrate 90 percent virus removal. The request shall be based on a watershed sanitary survey conducted in accordance with section 64665, within 12 months of the date of the request, that demonstrates a lack of virus hazard in the watershed.
- (h) The Department's approval of alternative filtration technologies, including establishment of performance standards and monitoring requirements, shall be done in accordance with the permit process specified in sections 116525 through 116550 of the Health and Safety Code.

## 64463.1 of Chapter 17, Title 22, CCR states in relevant part:

- (a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs:
  - (5)Other violation or occurrence that has the potential for adverse effects on human health as a result of short-term exposure, as determined by the Department based on a review of all available toxicological and analytical data;
- (b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the Department that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:
  - (1) Give public notice pursuant to this section;
  - (2) Initiate consultation with the Department within the same timeframe; and
  - (3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.
- (c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms:
  - (1) Radio or television:
  - (2) Posting in conspicuous locations throughout the area served by the water system;
  - (3) Hand delivery to persons served by the water system; or
  - (4) Other method approved by the Department, based on the method's ability to inform water system users.

Date:

## **BOIL WATER NOTICE**

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

## **BOIL YOUR WATER BEFORE USING**

Failure to follow this advisory could result in stomach or intestinal illness.

Due to the recent event [e.g., water outage, power outage, flood, fire, earthquake or other emergency situation] requiring the use of Well 1A, the State Water Resources Control Board, Division of Drinking Water in conjunction with the Santa Cruz County Health Department, and **Forest Lakes Mutual Water Company** are advising residents of Forest Lakes to use boiled tap water or bottled water for drinking and cooking purposes as a safety precaution.

**DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, **let it boil for one (1) minute**, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water. [or This is the preferred method to assure that the water is safe to drink.]

## Optional alternative to include for prolonged situations where it fits.

- An alternative method of disinfection for residents that are not able to boil their water is to use fresh, unscented, liquid household bleach. To do so, add 8 drops (or 1/8 teaspoon) of bleach per gallon of clear water or 16 drops (or 1/4 teaspoon) per gallon of cloudy water, mix thoroughly, and allow it to stand for 30 minutes before using. A chlorine-like taste and odor will result from this disinfection procedure and is an indication that adequate disinfection has taken place.
- Water disinfection tablets may also be used by following the manufacturer's instructions.
- Optional: Potable water is available at the following locations: [List locations] Please bring a clean water container (5 gallons maximum capacity).

We will inform you when tests show that water is safe to drink and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

## For more information call:

Water Utility contact: [Name, title, phone & address of responsible utility representative].

State Water Resources Control Board – Division of Drinking Water District Office at (831) 655-6939.

Santa Cruz County Environmental Health

(831) 454-3069

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

#### PROOF OF NOTIFICATION

Compliance Order No. 02\_05\_15R\_003

## **Forest Lakes Mutual Water Company**

System Number: 4410016

#### Certification

As required by Section 64463.1 of the California Health and Safety Code, I notified the users of the water supplied by the Forest Lakes Mutual Water Company water system of the violations of Title 22, California Code of Regulations, as indicated below:

Required Action	Date Completed
Mail or Direct delivery of notice	
Public Notification – List Secondary Method Used:	
Signature of Water System Representative	——————————————————————————————————————

Attach a copy of the notice distributed by the system and proof of alternative method of distribution.

#### THIS FORM MUST BE COMPLETED AND RETURNED TO THE DIVISION

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or by both the fine and imprisonment.

## **Quarterly Progress Report**

Water System: Forest Lakes Mutual Water Company	Water System No: 4410016			
Violation: Surface Water Treatment Technique for Well 1A				
Calendar Quarter:	Date Prepared:			
Summary of Compliance P	lan			
Tasks Completed in the Quarter				
Tasks Remaining to Complete				
anticipate Compliance Date:				
ystem Representative Name & Title:				
ystem Representative Signature:				

This form should be prepared and signed by the water system personnel with appropriate authority to implement the directives of the Compliance Order and the Corrective Action Plan. Please attach additional sheets as necessary. The quarterly progress must be submitted by the 10<sup>th</sup> day of the month following the end of each subsequent quarter.